



JANUARY 14, 2003

Plenary Session—Exhibit Hall D

7:00 AM
Registration

8:30 AM
Welcome and Opening Remarks
Samuel N. Luoma, CALFED & USGS

8:40 AM
Seagrass Restoration Studies in Florida:
Lessons Learned about Site Selection and Monitoring Programs
Susan Bell, University of South Florida, Tampa, FL

9:10 AM
Beyond California—
Observations on Science in Other Restoration/Water Management Programs
Kim Taylor, CALFED Bay-Delta Program

9:40 AM
Ocean Conditions, Estuaries, and the Bottleneck Theory of Salmon Management
Dan Bottom, National Marine Fisheries Service, Newport, OR

10:10 AM
BREAK

10:30 AM
The Role of Science in Ecologically Sustainable Water Management
Brian Richter, The Nature Conservancy

11:00 AM
Science in Support of Ecosystem Restoration: A Tribute to Aretha Franklin
James Cloern, U.S. Geological Survey, Menlo Park, CA

11:30 AM
The Conflicted Boundaries Between Science and Policy
Helen Ingram, University of California, Irvine

12:00 PM
LUNCH

Concurrent Session—Room 204

Function and Effects of
Flooded Islands
Session Chair: Lisa Lucas, USGS

1:00 PM
Effects of the Tides, Geometry, Meteorology, and Project Operations on Circulation and Mixing in a Flooded Island Environment: Lessons from Mildred Island
Jon Burau, USGS

1:20 PM
Circulation and Mixing within Delta Flooded Island Habitats: Implications for Ecosystem Restoration
Nancy Monsen, USGS

1:40 PM
Spatial and Seasonal Variability in the Hydrodynamics of Shallow Water Habitats in the Delta
Mark Stacey, UC Berkeley

2:00 PM
Sherman Lake: A Case Study in Circulation and Mixing in a Shallow Estuarine Environment
Catherine Ruhl, USGS

2:20 PM

2:40 PM
Circulation in Honker Bay, A Natural Shallow Water Habitat
Jessica Lacy, USGS

3:00 PM
Bay-Delta Geometry: The Shape of Things and Their Impact on Salinity Mixing
Christopher Enright, DWR

3:20 PM
Predicting Restored Habitats: The Physical Evolution of Tidal Wetlands in Breached Sites
Michele Orr, Philip Williams & Associates

3:40 PM
Changes in Carbon Dynamics Over Time in a Restored Wetland in the Delta
Robin Miller, USGS

4–7:00 PM

Concurrent Session—Exhibit Hall D

Adaptive Assessment
of Restoration Programs
Session Chair: Jeff Mount, UC Davis

A Whole System Approach to Geomorphic Monitoring and Adaptive Management, Cosumnes River, CA
Jeff Mount, UC Davis

River Restoration Decision Support System-Application in the Salmon River Sub-Basin, Idaho
J. Carter Borden*, Romberg Tiburon Center, SFSU

Assessment of Species Response to Restoration and Water Management
Warren Shaul, Jones & Stokes

Measuring Bay-Delta Health: The Bay Region Ecological Scorecard
Anitra Pawley, The Bay Institute

Examples of Adaptive Management in Action: Linking Monitoring to Project Objectives and Implementation
Daniel Efseaff, Sacramento River Partners

CALFED ERP Projects Review—A Look Back
Vance Russell, Kleinschmidt Associates

The Adaptive Management Forum for Large-Scale Channel and Riverine Habitat Restoration Projects: A Collaborative Peer Review Process
Rhonda Reed, CALFED Bay-Delta Program

Using the Ecosystem Management Decision Support System Together with a Comprehensive Watershed Data Management Tool to Target Restoration Opportunities and to Support AM in Battle Creek
Michael Ward, Terraqua, Inc.

Concurrent Session—Room 203

Fish Passage Facilities
and Operation
Session Chairs: Joseph Cech, Jr., UC Davis, and Marcin Whitman, NMFS

Technical Advances and Results of Fish Passage Research on Internal Screw-Type Lifts and Pumps in California
Charles Liston, USBR

Average Channel Velocity and Delta Smelt Louver Efficiency at the Tracy Fish Collection Facility: Improving Facility Operations and Delta Smelt Salvage
Mark Bowen, USBR

Close Encounters with a Fish Screen: Anatomy of an Impingement
David White, NOAA Fisheries

Close Encounters with a Fish Screen: Linking Laboratory and Field Studies on Juvenile Chinook Salmon
Christina Swanson, UC Davis

Validation of an Individual-Based Movement Model for Fish Extraction Facilities
Bertrand Lemasson*, Utah State Univ.

Hydrodynamic Field Investigation on the San Joaquin River Near the Head of Old River Barrier
Jay Cuetara, USGS

Effects of Auxiliary Flows (Pumped Across Grant Line Canal Barrier) on the San Joaquin River Dissolved Oxygen Levels
Hari Rajbhandari, DWR

Evaluating Entrainment Vulnerability to Agricultural Irrigation Diversions: A Comparison Among Open Water Fishes
Matt Nobriga, DWR

Concurrent Session—Room 202

Effects of Nonnative
Invasive Species
Session Chairs: Kim Webb, FWS, and Erin Williams, FWS

What Distinguishes A High-Impact Invader?
Heather Peterson*, Romberg Tiburon Center, SFSU

Spread of Exotic Cordgrasses and Hybrids (*Spartina* sp) in the Tidal Marshes of San Francisco Bay
Debra Ayres, DWR

The Impact of Invasive *Spartina* on San Francisco Bay Song Sparrow Populations: Direct and Indirect Influences
J. Cully Nordby, UC Berkeley

Feeding Ecology and Potential Predatory Impact of *Tortanus dextrilobatus*, an Invasive Carnivorous Copepod in the San Francisco Estuary
Rian Hooff*, Romberg Tiburon Center, SFSU

Recent Investigations of Introduced Species in the Foodweb of the San Francisco Estuary
Wim Kimmerer, Romberg Tiburon Center, SFSU

Carbon, Crustacea and Carnivory: Using Stable Isotopes to Discern the Trophic Ecology of the Chinese Mitten Crab in its New Home in San Francisco Bay
Deborah Rudnick*, UC Berkeley

Ontonogenetic Feeding Shifts in Native and Alien Fish in the Cosumnes River Watershed
Beth Chasnoff*, UC San Diego

Cattle Grazing in Vernal Pool Grasslands: Can We Increase the Diversity of Native Plant Species by Reducing the Abundance of Exotics?
Jaymee Marty, TNC

* Denotes student presenter

POSTER SESSION/RECEPTION—EXHIBIT HALL E

Concurrent Session—Room 204

Function and Effects of Flooded Islands
(continued)
Session Chair: Lisa Lucas, USGS

8:30 AM Strong Diel Patterns of Phytoplankton Biomass in a Tidal Flooded Island: High Frequency and “Fast Biology”
Tara Schraga, USGS

8:50 AM Spatial Variability of Phytoplankton Dynamics in a Tidal Flooded Island
Cary Lopez, USGS

9:10 AM The Distribution and Temporal Trends in *Corbicula fluminea* Biomass and What They Tell Us About the Function of Habitats
Janet Thompson, USGS

9:30 AM Insights Gained from Top-Down Food Web Investigations in the Delta
Lenny Grimaldo*, DWR and SFSU

9:50 AM Should We Create More Permanent Shallow Water Habitat in the Delta? Example: McCormack Williamson Tract
Patrick Crain, UC Davis

10:10 AM BREAK

10:30 AM Biogeochemical Cycling of Nutrients and Trace Elements in Flooded Island Habitats
Martina Doblin, Old Dominion Univ., VA

10:50 AM Dissolved and Particulate Selenium Dynamics in Mildred’s Island: Biotic Controls on a Trace Element Cycle
Gregory Cutter, Old Dominion Univ., VA

11:10 AM The Future of Flooded Islands in the Delta: A Commentary
Peter Moyle, UC Davis

11:30 AM An Overview of CALFED Ecosystem Restoration Program Plans for Restoring Delta Flooded Islands
Lauren Hastings, DWR

11:50 AM LUNCH

Wetlands: Past, Present and Future
Session Chair: Peter Green, UC Davis

1:00 PM Trends in the Sediment Yield of the Sacramento River, 1957-2001
Scott Wright*, USGS

1:20 PM A Multi-Year Record of Sedimentary Processes and Marsh Surface Elevation Change in Restored and Ancient Tidal Marshes of the Delta
Denise Reed, Univ. of New Orleans

1:40 PM Initial Ecological Comparisons of Restored and Historical Marshes of San Francisco Estuary, and More Pristine Brackish Marshes Along the Central CA Coast
Christopher Kitting, CSU Hayward

2:00 PM Processes of Geomorphic Evolution in a San Pablo Bay Restored Tidal Marsh
Stuart Siegal, Wetlands Water Resources

2:20 PM BREAK

2:40 PM Delta Levee Erosion: Long-Term Monitoring and Short-Term Processes
Bernard Bauer, USC

3:00 PM Carbon Storage and Sediment Accretion in Restored Wetlands on Twitchell Island
Judy Drexler, USGS

3:20 PM Transitional Habitats in Tidal Marsh Restoration: Avian Response to Mud Flat Formation on Tolay Creek, San Pablo Bay
Isa Woo, Humboldt State Univ. Foundation

3:40 PM The Effect of Channel Order on Fish Abundance, Community Composition, and Diet in a Tidal Marsh
Tammie Visintainer*, Romberg Tiburon Center, SFSU

4–7:00 PM POSTER SESSION/RECEPTION—EXHIBIT HALL E

Concurrent Session—Room 202

Riparian Restoration
Session Chair: Greg Golet,
The Nature Conservancy

Traditional Resource Management and Ecological Restoration of Riparian and Wetland Areas
Michelle Stevens, DWR

Using Ecosystem Function to Measure the Success of Riparian Forest Restoration: A Case Study from the Sacramento River
David Wood, CSU Chico

Reproductive Phenology and Groundwater Requirements for Seedlings of Three Pioneer Riparian Species on the Lower Tuolumne River
John Stella*, Stillwater Science

The Interaction of Biological and Physical Processes and the Long-Term Survival of Riparian Forests at the San Joaquin River National Wildlife Refuge
F. Thomas Griggs, Sacramento River Partners

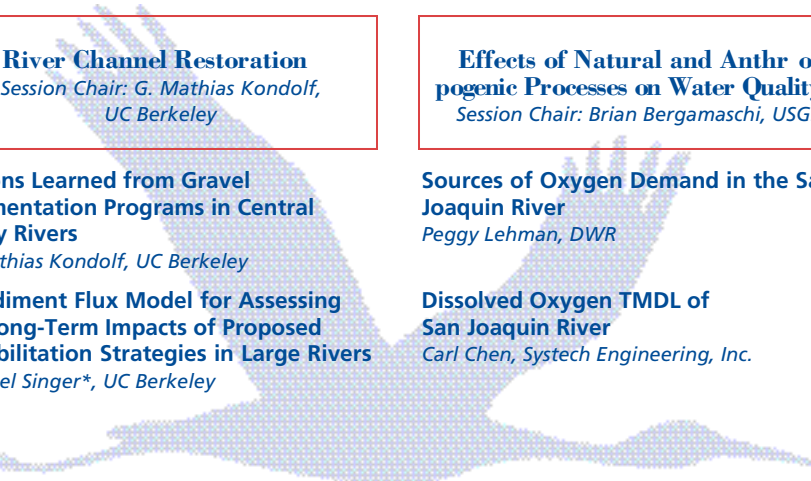
Landscape Scale Analysis of Valley Oak Restoration at the Cosumnes River Preserve
Kaylene Keller*, UC Davis

Chronosequence Analysis of Cottonwood Recruitment and Riparian Patch Dynamics on the Middle Sacramento River
Alexander Fremier*, UC Davis

Progress on Development of Spatial Modeling Tools for Riparian Landscape Restoration and Impact Assessment on the Sacramento River
Steven Greco, UC Davis

Linking Hydrological and Biological Dynamics in Riparian Landscapes: Empirical Models, Predictions and Uncertainty
Elizabeth Crone, Univ. of Montana

Lessons Learned from Restoring the Tuolumne River: At the End of the Day Project Success is when Design and Construction Come Together
Tony Barela, HDR, Inc.



River Channel Restoration
Session Chair: G. Mathias Kondolf, UC Berkeley

Lessons Learned from Gravel Augmentation Programs in Central Valley Rivers
G. Mathias Kondolf, UC Berkeley

A Sediment Flux Model for Assessing the Long-Term Impacts of Proposed Rehabilitation Strategies in Large Rivers
Michael Singer*, UC Berkeley

Oxbow Lakes of the Sacramento River: Physical Processes and Conservation Strategies
Ingrid Morken, UC Berkeley

Watershed Environmental Hydrology Model for Upper Cosumnes River Watersheds
ZhiQiang Chen, UC Davis

New Methods for Diagnosing and Managing Upslope Sediment Sources at the Watershed Scale, Napa River Basin, Napa County
Eileen Weppner, Pacific Watershed Associates

Interdisciplinary Approach to Rehabilitating Salmon Spawning Habitat and Fluvial Geomorphic Processes in the Central Valley
Gregory Pasternack, UC Davis

Geomorphic Processes and Salmonid Habitat in Sulphur and Carneros Creeks, Napa River Watershed
Sarah Pearce, SFEI

Assessing In-Stream Fish Habitat in the Context of Watershed Stewardship and a Broad Based Approach to Restoration and Conservation
Jonathan Koehler, Napa County. RCD

Concurrent Session—Room 105

From Mining to Microbes: Unraveling the Mercury Cycle in the San Francisco Bay Watershed
Session Chair: Mark Marvin-DiPasquale, USGS

Assessment of Hg Contributions from Historic Mercury and Gold Mine Sites in the Sulphur Cr Mining District to the Cache Cr Watershed, Comparisons with Other Mercury Sources and Implications for Remediation Activities
Ronald Churchill, CGS

Mercury Loading From the Upper Cache Creek Mining Districts
Tom Suchanek, FWS

Mercury and Methylmercury Concentrations and Loads in the Cache Creek Watershed, CA, January 2000 through May 2001
Joseph Domagalski, USGS

Preliminary Results of Mercury and Methylmercury Transport Studies in the Bear River and Yuba River Watersheds, 1999-2002
Charles Alpers, USGS

Spatial and Temporal Trends of Solid Phase Methyl and Total Mercury in the Delta
Wesley Heim, Moss Landing Marine Laboratories

Microbial Mercury Cycling in Sediments of the Delta
Mark Marvin-DiPasquale, USGS

Investigation of Potential Mercury “Translators” Between Aqueous Mercury Fractions, Low Trophic Level Bioindicators, and Large Fish in the Cache Cr. Watershed
Darell Slotton, UC Davis

Mercury in Sport Fish from the Delta Region
Jay Davis, SFEI

Field Assessment of Mercury Exposure of Aquatic Birds in the Delta Ecosystem Using the Avian Egg
Steven Schwarzbach, USGS

Effects of Natural and Anthropogenic Processes on Water Quality
Session Chair: Brian Bergamaschi, USGS

Sources of Oxygen Demand in the San Joaquin River
Peggy Lehman, DWR

Dissolved Oxygen TMDL of San Joaquin River
Carl Chen, Systech Engineering, Inc.

Tracing Nitrate Sources, Transformation, and Sinks from the Central Valley, Through the Delta, and Within the Bay Using Stable Isotope Techniques
Carol Kendall, USGS

Evaluation of Unknown Organic Contaminants in the San Francisco Estuary
Daniel Oros, SFEI

Potential Effects of Wetland Restoration on Subsidized Peat Soils: Release of Dissolved Organic Carbon and Disinfection Byproduct Precursors
Roger Fuji, USGS

Assessment of Processes Affecting Dissolved Organic Carbon Loads in Drainage Water on Twitchell Island
Steven Deverel, HydroFocus, Inc.

Estimating Dissolved Organic Carbon (DOC) Concentrations in the Delta with Limited Data
Jamie Anderson, DWR

The Contribution of Natural and Restored Wetlands to Changes in Dissolved Organic Material in the Delta and Estuary
Brian Bergamaschi, USGS

Concurrent Session—Room 203

Recent Research on California Salmonids
Session Chair: Ken Lentz, USBR

Demography, Distribution, and Habitat Use of Juvenile Steelhead in a Large, Regulated River
Ryon Kurth, DWR

Sediment and Salmon: Use of Gravel Permeability to Assess Survival-to-Emergence in Artificial Redds
Frank Ligon, Stillwater Sciences

New Otolith Carbon Isotope Method to Distinguish Tributary and Delta Use in Juvenile Chinook Salmon in the Sacramento-San Joaquin River System
Peter Weber, UC Berkeley

Emigration Timing, Abundance and Life History of Juvenile Winter Chinook Salmon Passing the Red Bluff Diversion Dam, 1995-1999
Phillip Gaines, FWS

The Sacramento River Winter Chinook Carcass Survey and its Use in Evaluating the Supplementation Program at the Livingston Stone National Fish Hatchery
Kevin Niemela, FWS

Migration Patterns of Chinook Salmon Smolts in the North, Central, and South Delta Using Radio Telemetry: Results of Research Performed in 2000-2002
David Vogel, Natural Resource Scientists, Inc.

Population Genetic Structure of Fall-Run Chinook in the Santa Clara Valley Watershed
Kevin Williamson*, UC Davis

Provenance Analysis of Chinook Salmon in the Santa Clara Valley Watershed
Dino Garcia-Rossi, UC Davis

Temporal Variation in Microsatellite Allele Frequencies Indicates Increasing Effective Number of Breeders in an Endangered Salmon Population
Dmitri Churikov, UC Davis

Trophic Ecology in the Bay-Delta Watershed
Session Chair: Larry Brown, USGS

Effects of Anthropogenic Ammonium Input and Flow on Primary Production in San Francisco Bay
Richard Dugdale, Romberg Tiburon Center, SFSU

The Effect of Spatial and Temporal Variability in Food Concentration on the Behavior, Feeding Physiology and Egg Production of the Estuarine Copepod *Acartia* sp.
Alexander Bochkansky, Romberg Tiburon Center, SFSU

Acartia spp. Copepods as Protozoan-Metazoan Food Web Links in San Francisco Bay: Microplankton Prey Communities and Copepod Feeding Dynamics 1997-2000
Gretchen Rollwagen-Bollens*, UC Berkeley

The Tidal Marsh Food Web: Species-Level Interactions and Trophic Flows Between Marsh Habitats
J. Letitia Grenier*, UC Berkeley

Landscape Level Influences on Aquatic Insects and Food Web Structure in the Cosumnes Watershed
Edwin Grosholz, UC Davis

Affects of Land Use and Dams on Stream Food Web Ecology
Kateri Harrison*

Documenting Physical/Biological Patch Structures During 2000 and 2001 USGS San Francisco Bay Hydrographic Surveys Using Alongtrack Data: Toward Characterizing Three Decades of Hydrographic Data
Karen Fisher, Romberg Tiburon Center, SFSU

Traveling in Uncharted Waters: Seabird Indicators of Climate and Oceanic Conditions Complement Traditional Information for Managing Bay Delta Fish
William Sydeman, PRBO

Concurrent Session—Room 204

Wetlands: Past, Present, and Future
(continued)
Session Chair: Peter Green, UC Davis

- 8:30 AMMarsh Plain Sedimentation Processes within the San Francisco Estuary
Steven Culberson, DWR
- 8:50 AMInterspecific Differences in Growth of *Scirpus* Species Across a Depth Gradient
Jeff Hart, H.A.R.T., Inc.
- 9:10 AMSpecies Composition and Structure of *Scirpus* Dominated Marshes
John Hunter, Jones & Stokes Associates
- 9:30 AMWaterside Stability of Delta Levees
Edwin Hultgren, Hultgren-Tillis Engineers
- 9:50 AMTidal Marsh and Floodplain Habitat Enhancement on the McCormack Williamson Tract: An Evaluation of Potential Scenarios with a Hydraulic Model and GIS
Christopher Hammersmark, UC Davis*

Concurrent Session—Room 202

Flood Plain Restoration
Session Chair: Anke Mueller-Solger, DWR

- Use of a Re-Created Floodplain by Native and Alien Fishes
Peter Moyle, UC Davis
- Processes Influencing Secondary Production in a Seasonal Floodplain of the Cosumnes River
Edwin Grosholz, UC Davis
- Food Quality and Quantity for Zooplankton in Two Contrasting Central California Floodplains
Anke Mueller-Solger, DWR
- Effects of Landscape Level Hydrologic Variation on the Biota of the Sacramento River and Yolo Bypass Floodplain
Ted Sommer, DWR
- Fish Communities and Habitat Characteristics of Perennial Floodplain Ponds of the Sacramento River with Implications for the Conservation of Native Fish
Frederick Feyrer, DWR

Concurrent Session—Room 205

Delta Cross Channel
Session Chair: Bruce Herbold, US EPA

- Hydrodynamics of the Delta Cross Channel Region
Jon Burau, USGS
- Delta Salinity Response to Experiments of Delta Cross Channel Gates Position
Samantha Salvia, CC Water District
- Repeated Surveys by Acoustic Doppler Current Profiler for Flow and Sediment Dynamics at Delta Cross Channel
Randal Dinehart, USGS
- Delta Cross Channel Hydrodynamics and the Potential for Entrainment of Outmigrating Juvenile Salmon
Michael Horn, USBR
- Responses of Coded-Wire Tagged Outmigrant Salmon to Delta Cross Channel Hydrodynamics
Bruce Herbold, US EPA

Concurrent Session—Room 203

Selenium and Salinity in the San Joaquin River and Delta
Session Chair: Mary Menconi, CVRWQCB

- Modeling the Biogeochemical Cycle of Selenium in the San Francisco Bay
Greg Cutter, Old Dominion Univ., VA
- Understanding Selenium Bioaccumulation in Shallow-Water Habitats of the Delta: Importance of Trophic Pathways, Biogeochemistry, and Hydrodynamics
Robin Stewart, USGS
- Ratios of Selenite and C Uptake in Suspended Phytoplankton: Implications for Prediction of SE Incorporation into Food Webs
Stephen Baines, Stony Brook Univ., NY
- From Water to Wildlife: Lag Time in Selenium Bioaccumulation in a Temporally Viable Flowing System
William Beckon, FWS
- Economic Modeling of Drainage Water Reuse and Treatment
Ray Hoagland, DWR

BREAK

- 10:30 AMBuilding a Habitat Conversion Model for San Francisco Bay Wetlands: A Multi-Species Approach for Integrating GIS and Field Data
Diana Stralberg, PRBO
- 10:50 AMRestoration and Enhancement of Salt Ponds in San Pablo Bay and San Francisco Bay
Nadine Hitchcock, CCC
- 11:10 AMReversing Effects of Subsidence in the Delta
Steven Deverel, HydroFocus, Inc.
- 11:30 AMProjecting Future Habitat Mixes: The Influence of Sediment Dynamics on Habitat Restoration Strategies
Jeremy Lowe, Philip Williams & Associates

- Fish Assemblages in Newly-Restored Tidal and Floodplain Habitats in the Napa Creek Flood Control Project
Mike Dietl, USACE
- Modeling Floodplain Flow on Lower Deer Creek
Michael MacWilliams, Stanford Univ.*
- Morphologic Modeling for Restoration - From the Thalweg to the Floodplain
Christopher Bowles, Philip Williams & Associates
- Landscape Change in the Napa River Watershed, 1800-2002: Implications for the Restoration of In-Stream, Floodplain, and Valley Floor Habitat
Robin Grossinger, SFEI

- Migratory Behavior of Radio-Tagged Juvenile Salmon in the Vicinity of the Delta Cross Channel in Response to Local Hydrodynamic Conditions
David Vogel, Natural Resource Scientists, Inc.
- The Movements of Adult Chinook Salmon, Outfitted with Ultrasonic Transmitters and External Spaghetti Tags, in the Delta and Delta Cross Channel
Derek Stein, DFG
- On the Future of the Delta Cross Channel Studies
Jon Burau, USGS

- Real-Time Wetland Salinity Management in the San Joaquin Valley (part I)
Mark Hanna, UCLA*
- A GIS-Based Simulation Model for Seasonal Wetland Drainage Salinity Management Using MIKESHE (part II)
Tom Heinzer, USBR
- Effects of Project Operations on Salinity in South Delta Exports
Barry Montoya, DWR
- Recalibration and Refinement of a Salinity-Outflow Model for the Delta (G-Model)
Richard Denton, CC Water District

LUNCH

Biology of Special Concern Species
Session Chair: Christina Swanson, The Bay Institute and UC Davis

- 1:00 PMReintroduction of Endangered Soft Bird's Beak to Restored Habitat in Suisun Marsh
Brenda Grewell, UC Davis
- 1:20 PMMultiple-Scale Predictors of Tidal Marsh Breeding Bird Distribution and Abundance in the San Francisco Estuary
Hildie Spautz, PRBO
- 1:40 PMHabitat Needs of the San Pablo Song Sparrow Across the Salt Marsh Tidal-Influence Gradient
J. Letitia Grenier, UC Berkeley*
- 2:00 PMTemporal Trends and Spatial Heterogeneity in Reproductive Success of Song Sparrows in San Francisco Bay and the Central Valley: Assessing the Role of Local Versus Global Influences
Nadav Nur, PRBO
- 2:20 PMIntegrated Monitoring to Understand the Health, Survival, and Population Dynamics of Delta Smelt
William Bennett, UC Davis

Fate and Effects of Organic Contaminants in Surface Waters
Session Chair: Kathy Kuivila, USGS

- A Mass Balance Model for the Fate of PAHs in the San Francisco Estuary
Ben Greenfield, SFEI
- Inputs of PCBs to the San Francisco Estuary Via Point Source Discharges
Donald Yee, SFEI
- Dynamics of Dissolved and Particle-Bound Organic Contaminants in Northern San Pablo Bay
Thomas Young, UC Davis
- Sediment-Associated Pesticides in the Bay-Delta Watershed and Their Toxicological Effects
Donald Weston, UC Berkeley
- Mixtures of Pesticides... Additive? More or Less
Kimberly Parks, Southern Illinois Univ*

Climate Change
Session Chairs: Mike Dettinger, USGS and Dan Cayan, USGS

- Climate Science Issues and Needs of the CALFED Bay-Delta Program
Michael Dettinger, USGS
- The Record of Natural Climate Variability Over the Central Valley Watershed
Malcolm Hughes, Univ. of Arizona
- Paleoclimate Changes in San Francisco Estuary and its Watershed
Frances Malamud-Roam, UC Berkeley
- Geomorphic Record of Climate Variability in Lowland Rivers in the Bay-Delta Watershed
Joan Florsheim, UC Davis
- Climate Variability - A Regional Stress on California's Water and Power Systems
Daniel Cayan, UC San Diego

Water Demand Reduction and Alternative Supply Possibilities
Session Chair: Mark Roberson, CALFED-Water Use Efficiency Program

- Managing Demand in California's Commercial, Industrial, and Institutional Sectors
Christine Jeck, Pacific Institute
- Managing Demand in California's Residential Sector
Dana Haasz, Pacific Institute
- Comparing and Contrasting Benefits and Costs of Water Use Efficiency Measures in Marin County and in Chula Vista
Bahman Sheikh
- Development of Water Use Efficiency Quantifiable Objectives to Address CALFED Goals
Mark Roberson, CALFED
- Reference Evapotranspiration Equations for California
Bekele Temesgen, DWR

BREAK

- 3:00 PMInter-Specific Differences in the Feeding Ecology Osmerids in the Low Salinity Zone of the San Francisco Bay-Delta Estuary
James Hobbs, UC Davis*
- 3:20 PMApplication of Genetic Markers for Species Identification and Population Structure Analysis of Green Sturgeon (*Acipenser medirostris*)
Joshua Israel, UC Davis*
- 3:40 PMInvestigations into the Effects of Chronic Stress on Swimming Performance, Standard Metabolic Rate and Metabolic Scope for Activity in Green Sturgeon, *Acipenser medirostris*
Scott Lankford, UC Davis*
- 4:00 PMAn Analysis of Changes in Fish Populations in South San Francisco Bay Over a Thirty Year Period
Katherine Schafer, Marine Science Institute
- 4:20 PMEffect of Tidal Marsh Restoration on Salt Marsh Harvest Mice: The Need for Indices of Habitat Quality
Michael Bias, Ecosystem Restoration Sciences, Inc.

- Investigating Causes of Toxicity to Algae in Central Valley Waterways: Modified Study Design & Method Development
Karen Larsen, CVRWQCB
- Habitat Condition and Benthic Community Assemblages in Agriculture-Dominated and Effluent-Dominated Waterbodies of Sacramento River Watershed
Robert Holmes, CVRWQCB
- Contamination Levels in Piscivorous Birds in the South San Francisco Bay
Cheryl Strong, SFBBO
- Water Quality Effects of Pesticides Used in Orchard Agriculture: Evaluating Management Alternatives and Off-Site Movement
Frank Zalom, UC Davis
- Managing and Analyzing Quality of Year-Round Runoff from Annual Cropping Systems in California
Paul Robins, Yolo County RCD

- Potential Effects of Climate Change on the Sacramento/San Joaquin Watershed and the San Francisco Estuary
Noah Knowles, UC San Diego
- Distributed Climate Change Hydrologies for Modeling Water Management in California
Tingju Zhu, UC Davis*
- Yogi Berra Was Right: Predicting the Effects of Climate Change on the San Francisco Estuary
Wim Kimmerer, Romberg Tiburon Center, SFSU
- Effects of Climate Change on Fish Populations of the San Francisco Estuary
William Bennett, UC Davis
- Climate Change and the Science-Policy Interface—A Case Study of California Water Policy
Michael Kiparsky, UC Berkeley*

- Membrane Technology: A Key Element in Expanding the Use of Nonconventional Water Sources in California
Fethi Benjemaa, DWR
- Linkage of CALSIM II CVP/SWP Planning Simulation Model with the Daily Time-Step Delta Operations Model for In-Delta Storage Investigations
Daniel J. Easton, DWR
- Conjunctive Use Opportunities for California: An Integrated Economic and Operations Perspective
Marion Jenkins, UC Davis
- Got Water? Developing an Optimal Water Acquisition Strategy for the CALFED Environmental Water Account
Adam Diamant, EPRIolutions, Inc.
- Evaluation of DOC Concentration From In-Delta Storage Project Islands Releases
Michael Mierzwa, DWR

ADJOURN